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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,555	06/26/2003	Wassana Apichatachutapan	12164	7282

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EXAMINER

COONEY, JOHN M

ART UNIT PAPER NUMBER

1711

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/607,555

Applicant(s)

APICHATACHUTAPAN ET AL.

Examiner

John m. Cooney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-12,14,16-32,34-38 and 40-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-12,14,16-32,34-38 and 40-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Applicant's arguments filed 10-31-05 have been fully considered but they are not persuasive.

The following objections and rejections are maintained or set forth in light of applicants' remarks and amendments.

### ***Specification***

The amendment filed 10-31-05 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The amendment to paragraph [0029] inserting KOH values of from about 448 to about 4488 mg KOH/g lacks support in the original disclosure.

Although applicants' recite a calculation for KOH values for fully OH based chain extenders of their invention. The calculation is based on the assumption that the chain extenders of applicants' originally disclosed invention were limited solely to hydroxyl functional chain extenders. This assumption, which is necessary to support the now inserted range of KOH values, can not fairly be made.

Additionally, applicants' supporting disclosure is not supportive of the additional extension of their endpoints made by the employment of the term "about" in defining the ranges of values.

Applicants are required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 45 and 46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants' amendment to the claims inserting KOH values of from about 448 to about 4488 mg KOH/g lacks support in the original disclosure. This is a new matter rejection.

Although applicants' recite a calculation for KOH values for fully OH based chain extenders of their invention. The calculation is based on the assumption that the chain extenders of applicants' originally disclosed invention were limited solely to hydroxyl functional chain extenders. This assumption, which is necessary to support the now inserted range of KOH values, can not fairly be made.

Additionally, applicants' supporting disclosure is not supportive of the additional extension of their endpoints made by the employment of the term "about" in defining the ranges of values.

Applicants are required to cancel the new matter in the reply to this Office Action.

Claims 1,3-12, 14, 16-32, 34-38, and 40-46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants' amendments to the claims setting forth ranges of functionality values for their respective isocyanate reactive components lack support in the originally filed disclosure. This is a new matter rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3-12, 14, 16-32, 34-38, and 40-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutter et al.(5,420,170).

Lutter et al. discloses preparations of polyurethane foams having densities as claimed prepared from isocyanates, polyols, chain extenders in amounts in overlap with those claimed, extenders reading on the crosslinkers as claimed, and other auxiliaries,

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regulators, and additives (see column 8 line 50- column 11 line 36, as well as, the entire document).

Lutter et al. differs from applicants' claims in that chain extenders are not particularly employed in amounts as claimed. However, Lutter et al. recites variation of their chain extender in amounts in overlap with the ranges of amounts claimed by applicants for the purpose of controlling polymer build-up. Accordingly, it would have been obvious for one having ordinary skill in the art to have varied the amounts of chain extender within the teachings of Lutter et al. for the purpose of controlling polymer build-up of the products obtained in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. It has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Further, a prima facie case of obviousness has been held to exist where the proportions of a reference are close enough to those of the claims to lead to an expectation of similar properties. *Titanium Metals v Banner* 227 USPQ 773. (see also MPEP 2144.05 I) Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Applicants' arguments have been considered but are unpersuasive. Applicants' have not provided a definitive and factually supported showing of new or unexpected results attributable to their compositions as claimed based on differences in their claims,

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and any showing would need to be commensurate in scope with the scope of the claims as they currently stand.

Claims 1,3-12, 14, 16-32, 34-38, and 40-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bleys(5,968,993).

Bleys discloses preparations of polyurethane foams prepared from isocyanates, polyols including Arcol 2580 meeting the requirements of applicants' 1<sup>st</sup> isocyanate reactive component and other polyether polyols (column 2 lines 23-33), and chain extenders in amounts as claimed, crosslinkers, and other materials conventional to such reaction mixtures(see example 3, as well as, the entire document).

Bleys differs from applicants' claims in that densities of the range of values as claimed are not particularly required. However, Bleys recites variation of the densities within their teaching through control of reactants and additive materials, such as amounts of blowing agent, and particularly discloses preferred densities of less than 600kg/m<sup>3</sup> for purposes of achieving their inventive concerns. Accordingly, it would have been obvious for one having ordinary skill in the art to have varied the amounts of blowing agent material employed within the teachings of Bleys for the purpose of controlling densities of the products obtained in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. It has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or

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workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Further, a prima facie case of obviousness has been held to exist where the proportions of a reference are close enough to those of the claims to lead to an expectation of similar properties. *Titanium Metals v Banner* 227 USPQ 773. **(see also MPEP 2144.05 I)** Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Bleys differs from applicants' claims in that it does not recite with specificity employment of an additional polyether polyol meeting applicants' claim defined 2<sup>nd</sup> isocyanate reactive component. However, Bleys own teaching discloses employment of other polyether polyols for achieving the purposes of their invention, and it would have been obvious for one having ordinary skill in the art to have controlled the make-ups of the additional polyether polyols disclosed by Bleys for use in the preparations of Bleys for the purposes of controlling the well studied reactivities and flexibilizing effects attributable to these materials in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. In the case of this element, too, it has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Further, a prima facie case of obviousness has been held to exist where the proportions of a reference are close enough to those of the claims to lead to an expectation of similar properties. *Titanium Metals v Banner* 227



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USPQ 773. (see also MPEP 2144.05 I) Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Applicants' arguments have been considered but are unpersuasive. The recitation of viscoelastic in the preamble of applicants' claims does not serve to distinguish applicants' claims in a patentable sense. Applicants' have not provided a definitive and factually supported showing of new or unexpected results attributable to their compositions as claimed based on differences in their claims, and any showing would need to be commensurate in scope with the scope of the claims as they currently stand.

All rejections over Hager et al. are withdrawn or held to be inapplicable at this point in light of applicants' amendments but will need to be reconsidered upon applicants' removal of all new matter from the claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bleys (5,521,226) is cited for its disclosure of molecular weight information on Arcol 2580.

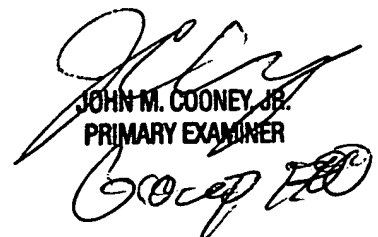
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN M. COONEY, JR.  
PRIMARY EXAMINER